DATASHEET
FUJITSU ESPRIMO E3520 E-STAR 5.0 DESKTOP PC

YOUR FLEXIBLE ECONOMY PC

ESPRIMO E3520 E-STAR 5.0

The ESPRIMO E3520 E-Star5 is the right choice for large enterprise customers requiring the latest standard performance features. This small form factor PC, less than 13 litres in volume, combines top performance and extremely attractive prices. Equipped with a power supply unit with up to 87% efficiency and selected components it meets the ENERGY STAR® standard, thus saving energy and protecting the environment. Freely configurable, with proven technology and an extended product lifecycle of 12 months, this PC is the perfect choice for cost-driven projects.

EXCELLENT PRICE / PERFORMANCE RATIO

Cost-effective system for major customer projects

- Entry-level PC with standard technology

FLEXIBILITY

Freedom of choice with tailored systems, perfect fit for specific requirements

- Flexible logistic concept - customizing program (made4you)

RELIABLILITY

Excellent quality and functional stability

- Proprietary development and production in Europe

LIFECYCLE

Hardware continuity for long lasting project needs

- Managed lifecycle up to 12 months

MEETS ENERGY STAR® 5.0 AND BLUE ANGEL STANDARDS

Low power consumption and low costs, without any loss in performance.

- Effective power supply of up to 87%

COMPONENTS

PROCESSOR	Intel® Core™2 Quad processor Q9650 (4C/4T, 3.0 GHz, 12 MB, 1333 MHz)
	Intel® Core™2 Quad processor Q9550 (4C/4T, 2.83 GHz, 12 MB, 1333 MHz)
	Intel® Core™2 Quad processor Q9505 (4C/4T, 2.83 GHz, 6 MB, 1333 MHz)
	Intel® Core™2 Quad processor Q9400 (4C/4T, 2.66 GHz, 6 MB, 1333 MHz)
	Intel® Core™2 Quad processor Q8300 (4C/4T, 2.5 GHz, 4 MB, 1333 MHz)
	Intel® Core™2 Duo processor E8600 (2C/2T, 3.33 GHz, 6 MB, 1333 MHz)
	Intel® Core™2 Duo processor E8500 (2C/2T, 3.16 GHz, 6 MB, 1333 MHz)
	Intel® Core™2 Duo processor E8400 (2C/2T, 3.0 GHz, 6 MB, 1333 MHz)
	Intel® Core™2 Duo processor E7600 (2C/2T, 3.06 GHz, 3 MB, 1066 MHz)
	Intel® Core™2 Duo processor E7500 (2C/2T, 2.93 GHz, 3 MB, 1066 MHz)
	Intel® Pentium® processor E6300 (2C/2T, 2.8 GHz, 2 MB, 1066 MHz)
	Intel® Pentium® processor E5400 (2C/2T, 2.7 GHz, 2 MB, 800 MHz)
	Intel® Pentium® processor E5200 (2C/2T, 2.5 GHz, 2 MB, 800 MHz)
	Intel® Celeron® processor E3200 (2C/2T, 2.4 GHz, 1 MB, 800 MHz)
MEMORY MODULES	1 GB (1 module(s) 1 GB) DDR2, 800 MHz, PC2-6400
	2 GB (1 module(s) 2 GB) DDR2, 800 MHz, PC2-6400
	2 GB (2 module(s) 1 GB) DDR2, 800 MHz, PC2-6400
	4 GB (1 module(s) 4 GB) DDR2, 800 MHz, PC2-6400
HARD DISK DRIVES (INTERNAL)	SATA II, 7200 rpm, 1000 GB, 3.5-inch, S.M.A.R.T.
	SATA II, 7200 rpm, 500 GB, 3.5-inch, S.M.A.R.T.
	SATA II, 7200 rpm, 320 GB, 3.5-inch, S.M.A.R.T.
	SATA II, 7200 rpm, 250 GB, 3.5-inch, S.M.A.R.T.
	SATA II, 7200 rpm, 160 GB, 3.5-inch, S.M.A.R.T.
Hard disk notes	Supporting NCQ and 3 GBit
GRAPHICS ADD ON CARDS (OPTIONAL)	DVI Adapter
	NVIDIA® Geforce® 9300GE low profile, 256 MB
	NVIDIA® Geforce® 9300GE low profile, 512 MB
	NVIDIA® Quadro NVS 290 low profile, 256 MB
MODULAR BAY OPTIONS	1.44 MB Floppy
	Blu-ray Disc Triple Writer, SATA I
	DVD-ROM, SATA I
	DVD Super Multi, SATA I
	MultiCard Reader 20in1, 3,5-Inch, USB 2.0
INTERFACE ADD ON CARDS/COMPONENTS (OPTIONAL)	
	Parallel Interface
Base unit	ESPRIMO E3520 E-Star5
MAINBOARD	
Mainboard type	D2841
Formfactor	µATX
Chipset	Intel® G41
Processor socket	LGA 775
Processor quantity maximum	1
System bus (FSB / HT / QPI)	up to 1333 MHz
Memory slots	2 DIMM (DDR2)
Supported capacity RAM (max.)	8 GB
Memory frequency	800 MHz
Memory notes	Dual channel support. For dual channel performance, 2 memory modules have to be ordered. Capacity per channel has to be the same.

MAINBOARD	
LAN	10/100/1000 MBit/s Broadcom BCM5784M
BIOS version	Phoenix 6.0
BIOS features	BIOS Flash EPROM update by software Recovery BIOS
Audio codec	Realtek ALC663
Audio features	High Definition audio, 5.1 surround sound
I/O CONTROLLER ON BOARD	
Serial ATA total	4
thereof eSATA	0
Controller functions	Serial ATA II 3 GBit
INTERFACES	
Audio: line-in	1
Audio: line-in / microphone	1
Audio: line-out	1
USB 2.0 total	8
USB front	2
USB rear	4
USB internal	2
VGA	1
DVI	optional
Serial (RS-232)	1 (9pi, 16 byte FIFO, 16550 compatible)
Mouse / Keyboard (PS/2)	2
Ethernet (RJ-45)	1
Parallel	optional (25pin with EPP and ECP)
INPUT DEVICE / COMPONENTS	
	Optical USB wheel mouse Optional: Optical USB/PS2 tilt wheel mouse
DRIVE BAYS	
Drive bays total	3
3.5-inch internal bays	1
3.5-inch external bays	1
5.25-inch external bays	1
Drive bay notes	optional external bay as internal 3,5”
SLOTS	
PCI-Express x16	1 x (210 mm) low profile
PCI-Express x1	1 x (210 mm) low profile
PCI (32-bit / 33 MHz)	2 x (170/ 190 mm) low profile
GRAPHICS ON BOARD	
Graphics brand name	Intel® GMA 4500
Shared video memory	up to 256 MB
Refresh rate 1024 x 768 (recommended / max.)	85 Hz / -
Refresh rate 1280 x 1024 (recommended / max.)	85 Hz / -
Refresh rate 1600 x 1200 (recommended / max.)	85 Hz / -
TFT resolution (VGA)	1360 x 768 pixel 1440 x 900 pixel 1680 x 1050 pixel 1920 x 1200 pixel

GRAPHICS ON BOARD	
TFT resolution (DVI)	1360 x 768 pixel 1440 x 900 pixel 1680 x 1050 pixel 1920 x 1200 pixel
Graphics features	DirectX 10
Graphics notes	Tested resolutions, depending on display type additional resolutions and frequencies possible Shared memory depending on main memory size Resolution (color depth up to 32 Bit/pixel) For TFT we recommend using 60Hz
ELECTRICAL VALUES	
Power efficiency note	power supply efficiency (at 230V; 20% / 50% / 100% load) : 86% / 88% / 85%)
	0-Watt mode with hard-off switch
Rated voltage range	100 - 240 V
Rated frequency range	50 - 60 Hz
Operating voltage range	90 - 264 V
Operating line frequency range	47 - 63 Hz
Max. output of power supply	250 W
Power factor correction/active power	active
Monitor outlet	No
POWER CONSUMPTION	
Power consumption note	See white paper Energy Consumption
Link to Energy White Paper	http://docs.ts.fujitsu.com/dl.aspx?id=64f304e7-22c2-4e77-9e73-a7ab6f7b8d99
HEAT DISSIPATION	
Heat dissipation notes	See white paper Energy Consumption
NOISE FOR STANDARD CONFIGURATION (HDD, ODD, FDD)	
Noise emission	According to ISO9296
Related Processors for noise	Intel® Core2™2 Duo E8600
Noise Operation mode 1: ODD load (Blue angel requirement)	4.4 B / 29 dB(A)
Noise Operation mode 2: HDD load (Blue angel requirement)	4.1 B / 26 dB(A)
Noise Operation mode 3: CPU 90% load (Blue angel requirement)	4.0 B / 25 dB(A)
Noise Operation mode 4: High load	4.1 B / 26 dB(A)
Noise Operation mode 5: Office applications	4.1 B / 26 dB(A)
Idle mode (Blue Angel requirement)	4.0 B / 24 dB(A)
Noise notes / description	A weighted sound power level Lwad (in B) / workplace related A-weighted sound pressure level LpAm (in dB(A)), Bystander position
DIMENSIONS / WEIGHT / ENVIRONMENTAL	
Dimensions (W x D x H)	405 x 330 x 105 mm
Operating position	Vertical / horizontal (optional, feet needed)
Weight	approx. 10 kg
Weight notes	Actual weight may vary depending on configuration
Operating ambient temperature	15 - 35°C
COMPLIANCE	
Product	ESPRIMO E3520
Model	DTL1-D2841
Germany	Blauer Engel / Blue Angel in progress GS
Europe	CE
USA/Canada	FCC Class B CSA

COMPLIANCE	
Global	RoHS (Restriction of hazardous substances) WEEE (Waste electrical and electronical equipment) Microsoft Operating Systems (HCT / HCL entry / WHQL) ENERGY STAR® 5.0 EPEAT® Silver
Compliance link	https://sp.ts.fujitsu.com/sites/certificates/default.aspx
OPERATING SYSTEM	
Operating system optional preinstalled	Microsoft® Windows® 7 Home Premium Microsoft® Windows® 7 Professional Microsoft® Windows Vista® Home Basic Microsoft® Windows Vista® Home Premium Microsoft® Windows Vista® Business 32-bit TwinLoad Microsoft® Windows® XP Professional (DVD)
Operating system compatible	Linux
Operating system notes	All Windows Vista® and Windows® 7 versions are Office 2007 ready.
ADDITIONAL SOFTWARE	
Additional software (preinstalled)	Nero Essentials S (burning software)
Additional software (optional)	Recovery DVD for Windows® Drivers & Utilities DVD (DUDVD) CyberLink PowerDVD BD (playback software for Blu-ray Disc™, only with Blu-ray Disc™ drive)
COMPATIBILITY (REFERENCES)	
	DMI 2.0 PC 2001 WMI 1.5 USB 2.0
MANAGEABILITY	
Manageability features	DeskUpdate Driver management DeskView Migrate (optional) DeskView Control (optional) PXE 2.1 Boot code Wake up from S5 (off mode)
DeskView features	WoL (Wake on LAN)
Manageability link	http://ts.fujitsu.com/manageability http://www.altiris.com/fujitsu
SECURITY	
Physical security	Kensington Lock support Eye for padlock
System security	Boot sector virus protection Write protect option for the Flash EPROM Boot protection for floppy disk / CD drive and write protection for floppy disk drive Control of all USB interfaces
User security	User and supervisor BIOS password Optional: Access protection via external SmartCard reader Optional: Access protection via internal SmartCard reader
PACKAGING INFORMATION	
Packaging dimension	500x290x540 mm
Max. quantity / pallet	24
Material - Weight (g) Carton	1270 g
Material - Weight (g) EPS / PS	200g
Material - Weight (g) PE	appr. 60 g
Packaging notes	printed user documentation is bleached in chlorine free process
WARRANTY	
Standard Warranty	1 year
Service level	(depending on country)
MAINTENANCE AND SUPPORT SERVICES - THE PERFECT EXTENSION	
Recommended Service	5x9, Response Time: Next Business Day

WARRANTY	
Spare Parts availability	5 years
Service Weblink	http://ts.fujitsu.com/Supportservice

FUJITSU PLATFORM SOLUTIONS

In addition to Fujitsu ESPRIMO E3520 E-Star 5.0, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

Dynamic Infrastructures
With the Fujitsu Dynamic Infrastructures approach, Fujitsu offers a full portfolio of IT products, solutions and services, ranging from clients to datacenter solutions, Managed Infrastructure and Infrastructure as-a-Service. How much you benefit from Fujitsu technologies and services depends on the level of cooperation you choose. This takes IT flexibility and efficiency to the next level.

Computing Products
www.fujitsu.com/global/services/computing/

Software
www.fujitsu.com/software/

MORE INFORMATION

Learn more about Fujitsu ESPRIMO E3520 E-Star 5.0, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.
http://ts.fujitsu.com/ESPRIMO

FUJITSU GREEN POLICY INNOVATION

Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment. Using our global know-how, we aim to resolve issues of environmental energy efficiency through IT. Please find further information at http://www.fujitsu.com/global/about/environment/

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